

## Claims

What is claimed is:

1. An operating procedure for a motor (1) of an electric powered tool, an operating idle speed of the motor (1) is set to a value by regulator electronics (4), the operating idle speed is the same as a chosen operating speed ( $n_1$ ), wherein the motor is run on a pre-determined, higher idle speed ( $n_2$ ) for cooling purposes should there be no moment of strain ( $M_2$ ) for the motor (1).
2. The operating procedure of claim 1, wherein the motor is switched over to an increased idle speed ( $n_2$ ) after a specified idle time (ST) while the motor (1) is running on the operating idle speed.
3. The operating procedure of claim 1, wherein the idle operation is determined by measurement of the motor current flow (I) to the motor (1).
4. The operating procedure of claim 1, wherein the idle operation is determined by measurement of the turning moment (M) of the motor (1).
5. The operating procedure of claim 2, wherein the idle time (ST) is determined in correspondence with a previous strain on the motor (1).
6. The operating procedure of claim 2, wherein the idle time (ST) is shortened should the motor (1) have previously been run in overload.
7. The operating procedure of claim 1, wherein an operating speed ( $n_1$ ) is switched over as soon as a moment of strain above an idle running moment is applied to the motor (1).
8. The operating procedure of claim 1, wherein the increased idle speed ( $n_2$ ) is stopped when the motor (1) has been one of switched off and on again and there is no moment of strain to the motor.
9. An electric powered tool with regulator electronics (4) for the engine speed of the motor (1), an operating idle speed of the motor (1) is set to a value that is the same as a chosen operating speed ( $n_1$ ), wherein the regulator electronics (4) increases the engine speed of the motor to a suitable, pre-determined and increased idle speed ( $n_2$ ), for cooling purposes should there be no moment of strain ( $M_2$ ) on the motor (1).

10. The electric powered tool of claim 9, wherein a time measuring device (5), sends a trigger signal (7) to the regulator electronics (4) after a determined period of idle time has been completed to increase the engine speed of the motor (1) to an increased idle speed ( $n_2$ ).

11. The electric powered tool of claim 9, wherein a strain measuring device (6) measures the motor current flow to determine the idle operation of the motor (1) and sends an idle running signal (8) to the time measuring device (5) and the regulator electronics (4).

12. The electric powered tool of claim 11, wherein the strain measuring device (6) measures the operating strain on the motor (1) and sends a strain signal (9) to the time measuring device (5) to determine the idle time AT in correspondence with this strain.

13. The electric powered tool of claim 12, wherein the time measuring device (5) presents shorter idle time (AT) when a strong strain on the motor had been previously measured by the strain measuring device (6).

14. The electric powered tool of claim 13, wherein the regulator electronics (4) immediately sets the engine speed of the motor (1) to the operating speed ( $n_1$ ) when the idle running signal (8) shows that the motor is not run on idle speed.

15. The electric powered tool of claim 14, wherein the regulator electronics (4) sets the engine speed of the motor (1) to the increased idle speed ( $n_2$ ) should the motor have been one of switched off and on again and there was no moment of strain (M2) on the motor.